

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

YOR920030200US1
(590.109)

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

INCREASED PRECISION IN THE COMPUTATION OF A RECIPROCAL SQUARE ROOT

the specification of which (check one)

 x is attached hereto.

 was filed on as International Business Machines Docket No. YOR920030200US1

and was amended on (if applicable)

I her by state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any for ign application for patent or inventor's certificate, or PCT International application, having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)			Priority Claimed
(Number)	(Country)	(Day/Month/Year Filed)	<u> </u> Yes <u> </u> No
<u> </u>	<u> </u>	<u> </u>	<u> </u> Yes <u> </u> No
<u> </u>	<u> </u>	<u> </u>	<u> </u> Yes <u> </u> No
<u> </u>	<u> </u>	<u> </u>	<u> </u> Yes <u> </u> No

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below.

<u> </u> (Application Number)	<u> </u> (Filing Date)
<u> </u> (Application Number)	<u> </u> (Filing Date)

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

I hereby claim the benefit under 35 U.S.C. §120 of any United States Application(s), or §365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States, or PCT International application in the manner provided by the first paragraph of 35 U.S.C. §112, I acknowledge the duty to disclose information material to the patentability of this application as defined in 37 CFR § 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

<u>(Application Serial No.)</u>	<u>(Filing Date)</u>	<u>(Status) (patented, pending, abandoned)</u>
<u>(Application Serial No.)</u>	<u>(Filing Date)</u>	<u>(Status) (patented, pending, abandoned)</u>

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (list name and registration number).

Richard M. Ludwin (Reg. 33,010), Kevin M. Jordan (Reg. 40,277), Christopher A. Hughes (Reg. 26,914), John B. Hoel (Reg. 26,279), Joseph C. Redmond, Jr. (Reg. 18,753), Douglas W. Cameron (Reg. 31,596), Wan Yee Cheung (Reg. 42,410), Thu Ann Dang (Reg. 41,544), Louis P. Herzberg (Reg. 41,500), Derek S. Jennings (Reg. No. 41,473), Stephen C. Kaufman (Reg. 29,551), Daniel P. Morris (Reg. 32,053), Allison D. Mortinger (Reg. 39,306), Louis J. Percello (Reg. 33,206), Robert M. Trepp (Reg. 25,933), Gail M. Zarick (Reg. 43,303), and Rafael Perez-Pineiro (Reg. 46,041).

Send Correspondence to: PERENCE & ASSOCIATES, 400 Broad Street, Pittsburgh, PA 15143

Direct Telephone Calls to: (name and telephone number) Stanley D. Perence III, (412) 741-8400

Robert F. Enenkel

Full name of sole or first inventor

Inventor's Signature

Date

322 Main Street N., Markham, Ontario, CANADA L3P 1Z1

Residence

Canada

Citizenship

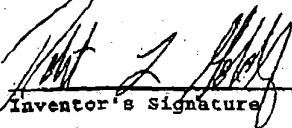
Same as above

Post Office Address

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

R bert L. Goldiez

Full name of second joint-inventor, if any



Inventor's signature

Date

7/31/2003

526 Kellyridge Drive, Apex, North Carolina 27502

Residence

USA

Citizenship

Same as above

Post Office Address

T.J. Christopher Ward

Full name of third joint-inventor, if any

Inventor's signature

Date

43 Matthes Road, Briarcliff Manor, New York 10510

Residence

United Kingdom

Citizenship

Same as above

Post Office Address

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

YOR920030200US1
(590.109)

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

INCREASED PRECISION IN THE COMPUTATION OF A RECIPROCAL SQUARE ROOT

the sp cification of which (check one)

☒ is attached hereto.

_____ was filed on _____ as International Business Machines Docket No. YOR920030200US1
and was amended on _____ (if applicable)

I hereby state that I have reviewed and understand the contents of the above identified sp cification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56.

I her by claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application, having a filing date before that of the application on which priority is claim d:

Prior Foreign Application(s)			Priority Claimed
(Number)	(Country)	(Day/Month/Year Filed)	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below.

_____ (Application Number)	_____ (Filing Date)
_____ (Application Number)	_____ (Filing Date)

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

I her by claim the benefit under 35 U.S.C. §120 of any United States Application(s), or §365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States, or PCT International application in the manner provided by the first paragraph of 35 U.S.C. §112, I acknowledge the duty to disclose information material to the patentability of this application as defined in 37 CFR § 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)
--------------------------	---------------	---

(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)
--------------------------	---------------	---

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (list name and registration number).

Richard M. Ludwin (Reg. 33,010), Kevin M. Jordan (Reg. 40,277), Christopher A. Hughes (Reg. 26,914), John E. Hoel (Reg. 26,279), Joseph C. Redmond, Jr. (Reg. 10,753), Douglas W. Cameron (Reg. 31,596), Wan Yee Cheung (Reg. 42,410), Thu Ann Dang (Reg. 41,544), Louis P. Herzberg (Reg. 41,500), Derek S. Jennings (Reg. No. 41,473), Stephen C. Kaufman (Reg. 29,551), Daniel P. Morris (Reg. 32,053), Alison D. Mortinger (Reg. 39,306), Louis J. Percello (Reg. 33,206), Robert M. Trepp (Reg. 25,933), Gail H. Zarick (Reg. 43,303), and Rafael Perez-Pineiro (Reg. 46,041).

Send Correspondence to: FERENCE & ASSOCIATES, 400 Broad Street, Pittsburgh, PA 15143

Direct Telephone Calls to: (name and telephone number) Stanley D. Ference III, (412) 741-8400

Robert F. Enenkel

Full name of sole or first inventor

Inventor's Signature

Date

322 Main Street N., Markham, Ontario, CANADA L3P 1Z1
Residence

Canada

Citizenship

Same as above

Post Office Address

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

Robert L. Goldiez

Full name of second joint-inventor, if any

Inventor's Signature

Date

526 Kellyridge Drive, Apex, North Carolina 27502

Residence

USA

Citizenship

Sam as above

Post Office Address

T.J. Christopher Ward

Full name of third joint-inventor, if any

T.J.C. Ward
Inventor's signature

July 31, 2003
Date

43 Matthes Road, Briarcliff Manor, New York 10510

Residence

United Kingdom

Citizenship

Sam as above

Post Office Address

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

YOR920030200US1
(590.109)

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name:

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

INCREASED PRECISION IN THE COMPUTATION OF A RECIPROCAL SQUARE ROOT

the specification of which (check one)

☒ is attached hereto.

_____ was filed on _____ as International Business Machines Docket No. YOR920030200US1

and was amended on _____ (if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application, having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)			Priority Claimed
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below.

_____	_____
(Application Number)	(Filing Date)
_____	_____
(Application Number)	(Filing Date)

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

I hereby claim the benefit under 35 U.S.C. §120 of any United States Application(s), or §365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States, or PCT International application in the manner provided by the first paragraph of 35 U.S.C. §112, I acknowledge the duty to disclose information material to the patentability of this application as defined in 37 CFR § 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

_____ (Application Serial No.)	_____ (Filing Date)	_____ (Status) (patented, pending, abandoned)
-----------------------------------	------------------------	--

_____ (Application Serial No.)	_____ (Filing Date)	_____ (Status) (patented, pending, abandoned)
-----------------------------------	------------------------	--

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (list name and registration number).


Richard M. Ludwin (Reg. 33,010), Kevin M. Jordan (Reg. 40,277), Christopher A. Hughes (Reg. 26,914), John E. Hoel (Reg. 26,279), Joseph C. Redmond, Jr. (Reg. 18,753), Douglas W. Cameron (Reg. 31,596), Wan Yee Cheung (Reg. 42,410), Thu Ann Dang (Reg. 41,544), Louis P. Herzberg (Reg. 41,500), Derek S. Jennings (Reg. No. 41,473), Stephen C. Kaufman (Reg. 29,551), Daniel P. Morris (Reg. 32,053), Alison D. Mortinger (Reg. 39,306), Louis J. Percello (Reg. 33,206), Robert M. Trepp (Reg. 25,933), Gail H. Zarick (Reg. 43,303), and Rafael Perez-Pineiro (Reg. 46,041).

Send Correspondence to: FERENCE & ASSOCIATES, 400 Broad Street, Pittsburgh, PA 15143

Direct Telephone Calls to: (name and telephone number) Stanley D. Ference III, (412) 741-8400

Robert F. Enenkel

Full name of sole or first inventor



Inventor's Signature

July 31/03

Date

322 Main Street N., Markham, Ontario, CANADA L3P 1Z1

Residence

Canada

Citizenship

Same as above

Post Office Address

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

Robert L. Goldiez

Full name of second joint-inventor, if any

Inventor's Signature

Date

526 Kellyridge Drive, Apex, North Carolina 27502

Residence

USA

Citizenship

Sam as above

Post Office Address

T.J. Christopher Ward

Full name of third joint-inventor, if any

Inventor's signature

Date

43 Matth s Road, Briarcliff Manor, New York 10510

Residence

United Kingdom

Citizenship

Same as above

Post Office Address

RECORDATION FORM COVER SHEET PATENTS ONLY

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

To the Honorable Commissioner of Patents: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Robert F. Enenkel, Robert L. Goldiez and T.J. Christopher Ward

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment
☐ Security Agreement
☐ Other _____
- ☐ Merger
☐ Change of Name

Execution Date: 7/31/2003, 7/31/2003, 7/31/2003

2. Name and address of receiving party(ies):

Name: IBM Corporation

Address: _____

City: Armonk State: NY Zip: 10504

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s)

If this document is being filed together with a new application, the execution date of the application is: 7/31/2003

A. Patent Application No(s).

B. Patent No(s).

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Stanley D. Ference III

FERENCE & ASSOCIATES

Address: 400 Broad Street

City: Pittsburgh State: PA Zip: 15143

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$ 40.00

- ☐ Enclosed
☒ Authorized to be charged to deposit account
☒ Charge any deficiency to deposit account

8. Deposit account number:

50-0510

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true and correct copy of the original document.

Stanley D. Ference III
Name of Person Signing


Signature

July 31, 2003
Date

Total number of pages including cover sheet, attachments, and document: 7

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Mail Stop Assignments
P.O. Box 1450, Alexandria VA 22313-1450